

**Evolution Compétences  
Emplois Climat Île-de-France**



Liberté • Égalité • Fraternité  
RÉPUBLIQUE FRANÇAISE

PRÉFET  
DE LA RÉGION  
D'ÎLE-DE-FRANCE

 **île de France**





# Financiers and steering committee

## Financiers:

- DIRECCTE [regional directorate for companies, competition, consumption, work and employment] Île-de-France
- Le Conseil Régional [Regional Council (of)] Île-de-France
- L'Agence de l'eau Seine-Normandie (AESN), Rivières d'Île-de-France

## The Île-de-France steering committee (chaired by DIRECCTE) includes:

- AGEFOS PME
- AESN Rivières d'Île-de-France
- CAPEB Grand Paris
- CFDT
- CGPME
- CGC
- CGT
- Conseil régional Île-de-France
- DIRECCTE
- DRIEE
- DRIEA
- FAFSEA
- FEDENE
- FEDEREC
- FFB
- FNADE
- FRTP
- FNTR
- GIMELEC
- MEDEF
- OPCALIA
- Constructys OPCA de la construction
- OPCA Transport
- OPTILE
- SNTL
- SIAAP
- Syndicat des ENR
- SYNTEC Ingénierie
- UFE Electricité
- UIC
- UNEP Île-de-France
- UNICEM
- UPAR

# Scope of the ECECLI [Evolution Outlook Skills Employment Climate Île-de-France] study

		Themes			
		Waste	Construction and public works	Mobility	Landscaped areas
Sectors	Transport	Waste logistics	New public transport infrastructure	Public transport offers	Road development
					Developing the green corridor/blue corridor area
	Automotive	Dismantling the vehicle			
		Collecting and recycling waste from used motor vehicles, as well as recycling the product itself			
	Energy	Treating and recycling household and industrial waste			
		Biomass energy			
	Water	Reusing mud and wastewater			
		Energy recuperation from wastewater			
			New non-drinking water distribution networks (rain or purified)	River transport	Protecting catchment areas
			Managing life cycle of networks (compliant connections)	Managing meanders and banks while respecting the river's mobility area	Managing the flows of natural water in cities (managing rainwater and revegetation of banks of waterways)
		Wastewater treatment (eco-friendly wastewater treatment facility)		Water quality and soil decontamination	
Construction	Construction materials				
	Collecting and treating waste from building sites				
		Clean building sites			
		CEP [forward-looking study contract] public works sector CFP construction sector		Urban resilience/adapting to the effects of climate change	
		Extracting materials	Integrating electro mobility in buildings/how it interacts in them	Developing areas, family gardens, roofing and green roofs and walls, suburban agriculture and short channels	

Urban resilience/adapting to the effects of climate change

Developing areas, family gardens, green roofs and walls, suburban agriculture and short channels

# ECECLI Methodology

**Pilotage du projet** Comités de pilotage et comités techniques

Séminaire régional

## Phase 1 Etat des lieux

Etat des lieux des emplois et des compétences pour les thématiques et secteurs considérés

Environ 100 entretiens individuels et de groupe

## Phase 2 Construction des scénarios prospectifs

- Descriptif des scénarios avec les hypothèses retenues
- Cartographie des acteurs en Ile-de-France

Ateliers thématiques intersectoriels réunissant près de 60 participants

## Phase 3 Validation/recentrage des scénarios et évaluation des impacts emplois et compétences

- « Scénarios emploi » associés aux cinq secteurs pour l'Ile-de-France
- Compte-rendu des ateliers et impacts des scénarios en matière d'emplois et de compétences

# 35 professions and functions selected

## 10 professions and functions

FTE need > 300 in  
5 years from 2014

- Passenger coach driver
- Public works supervisor
- Public works, roads and pipelines site manager
- Manager of the freight logistics chain (materials and goods)
- Green space maintenance agent
- Green spaces maintenance agent
- Landscape design technician
- Installing Linky smart meters

## 13 professions and functions

FTE need between 100 and 300  
in 5 years from 2014

- Selective waste sorting agent
- Energy efficiency and flexibility agent
- Green infrastructure (green walls and roofs, phyto-purification, etc.)
- Installing solar and thermal panels
- Property and internal air quality survey
- Installing internal and external thermal insulation
- Developing urban roads and areas
- Managing vehicle fleet
- Reconditioning second-hand goods (clothes, digital equipment and domestic appliances, bicycles)
- Fitter for joinery, locks and equipment
- Household waste recycling centre technician

## 12 professions and functions

FTE need <100 in  
5 years from 2014

- Water distribution and sanitation maintenance officer
- Water distribution and sanitation electromechanical technician
- Water distribution and sanitation scheduler
- Installing communicating water
- Advisor to households on how to efficiently use water in homes
- Pipe layers
- Laboratory and water control technician
- Master composter
- Landscape architect
- Installing communicating Gazpar meters
- Maintaining shared transport systems (bicycles and vehicles)
- Developing digital service applications (transport, energy, etc.)

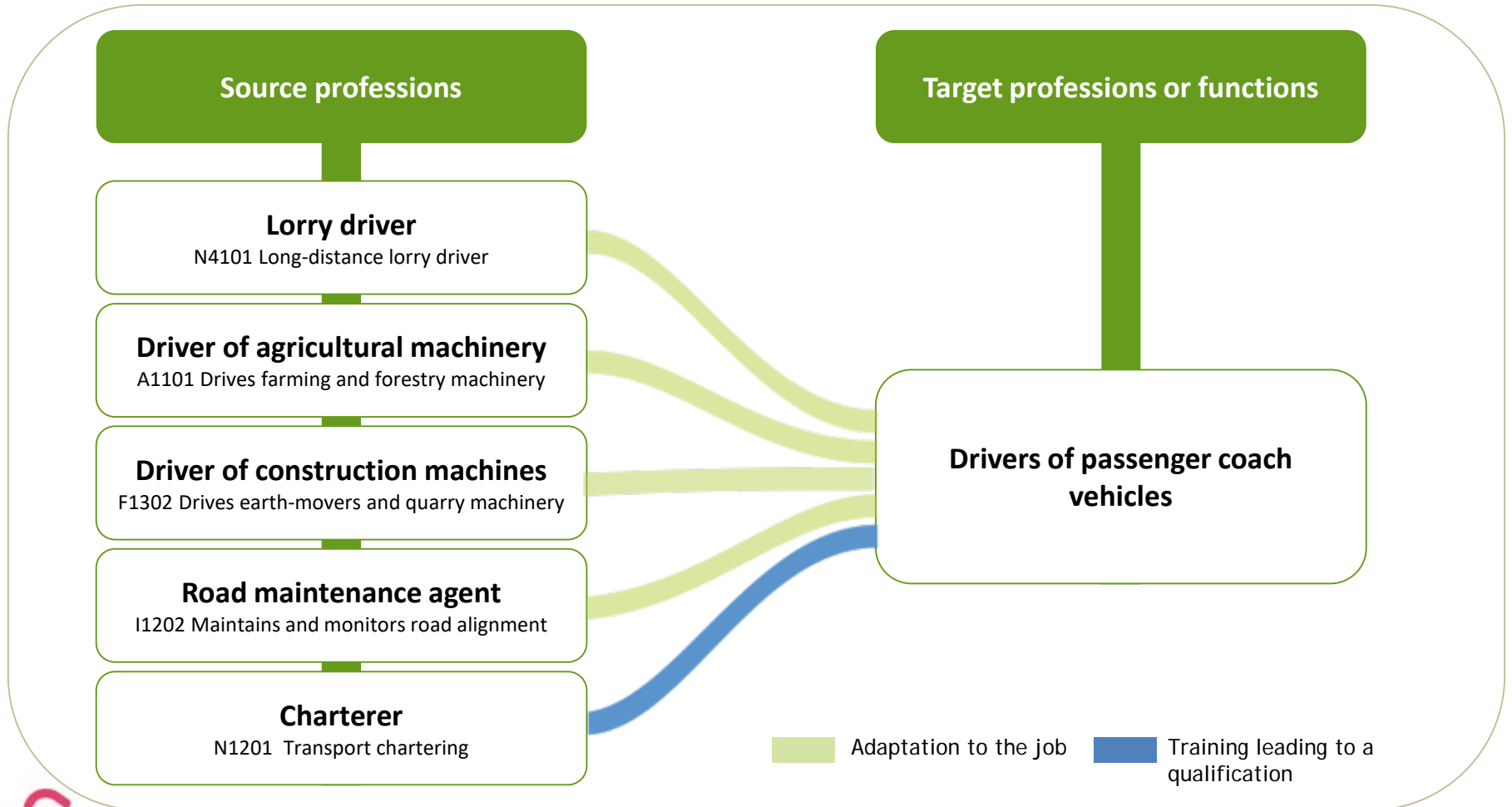
# How the decisive factors for the mobility theme impact employment and skills

Developing functions and professions	Number of jobs counted to date	Low-end hypothesis 2019		High-end hypothesis 2019	
		Number of jobs	FTE needs (gap)	Number of jobs	FTE needs (gap)
Passenger coach drivers	47 500	58 840	11 340	58 840	11 340
OPTILE passenger coach drivers	17 000	24 820	7 820	24 820	7 820
RATP passenger coach drivers	13 000	14 500	1 500	14 500	1 500
Rail transport (metro, RER, tramway, tram-train)	17 500	19 520	2 20	19 520	2 20

## Evolving skills

Using alternative driving systems; eco-driving and computer-assisted driving (automatic); using on-board information system and digitalisation of information for information systems.


# The interconnecting gateway between source and target professions: *the example of the passenger coach driver (mobility theme)*



# How the decisive factors for the landscaped and farming areas theme impact employment and skills (1)

Developing functions and professions	Number of jobs counted to date	Low-end hypothesis 2019		High-end hypothesis 2019	
		Number of jobs	FTE needs (gap)	Number of jobs	FTE needs (gap)
<b>Function: manage, protect and maintain natural and urban landscaped areas</b>	16 827	28 051	11 224	35 537	18 710
Environmental engineer/landscaping engineer	250	537	287	655	405
Environmental engineering technician	350	752	402	917	567
Community maintenance agent	7 420	9 044	1 625	12 086	4 666
Community maintenance technician	1 282	1 563	281	2 089	806
Gardener, landscape worker	6 800	14 601	7 801	17 822	11 022
Technician, site supervisor	700	1 503	803	1 835	1 135
Green infrastructure technician	25	51	26	133	108

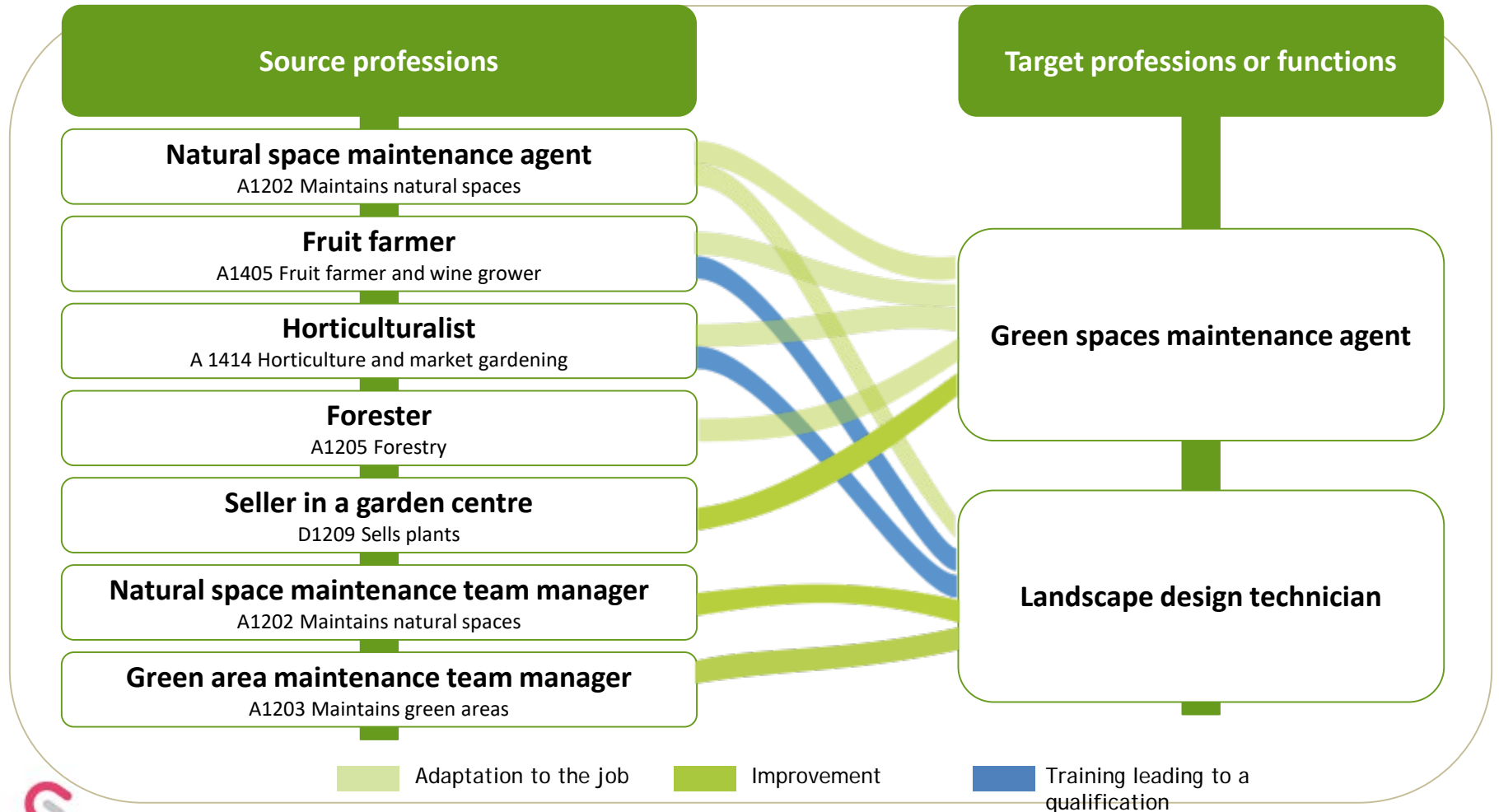




# How the decisive factors for the landscaped and farming areas theme impact employment and skills (2)

- **Evolving skills:**
  - Using alternative maintenance methods to phytosanitary products; reinforcing biodiversity awareness in putting into place and maintaining landscaped areas; involvement in more functional landscaped areas (ecological corridors, for example); new uses of plants in the small and large water cycle and skills improvement with regards to plants; balanced water management and rainwater harvesting

# The interconnecting gateway between source and target professions: *the example of the green space maintenance agent and the landscape technician*



# How the decisive factors for the waste theme impact employment and skills: the selective waste sorting agent (or ambassador)

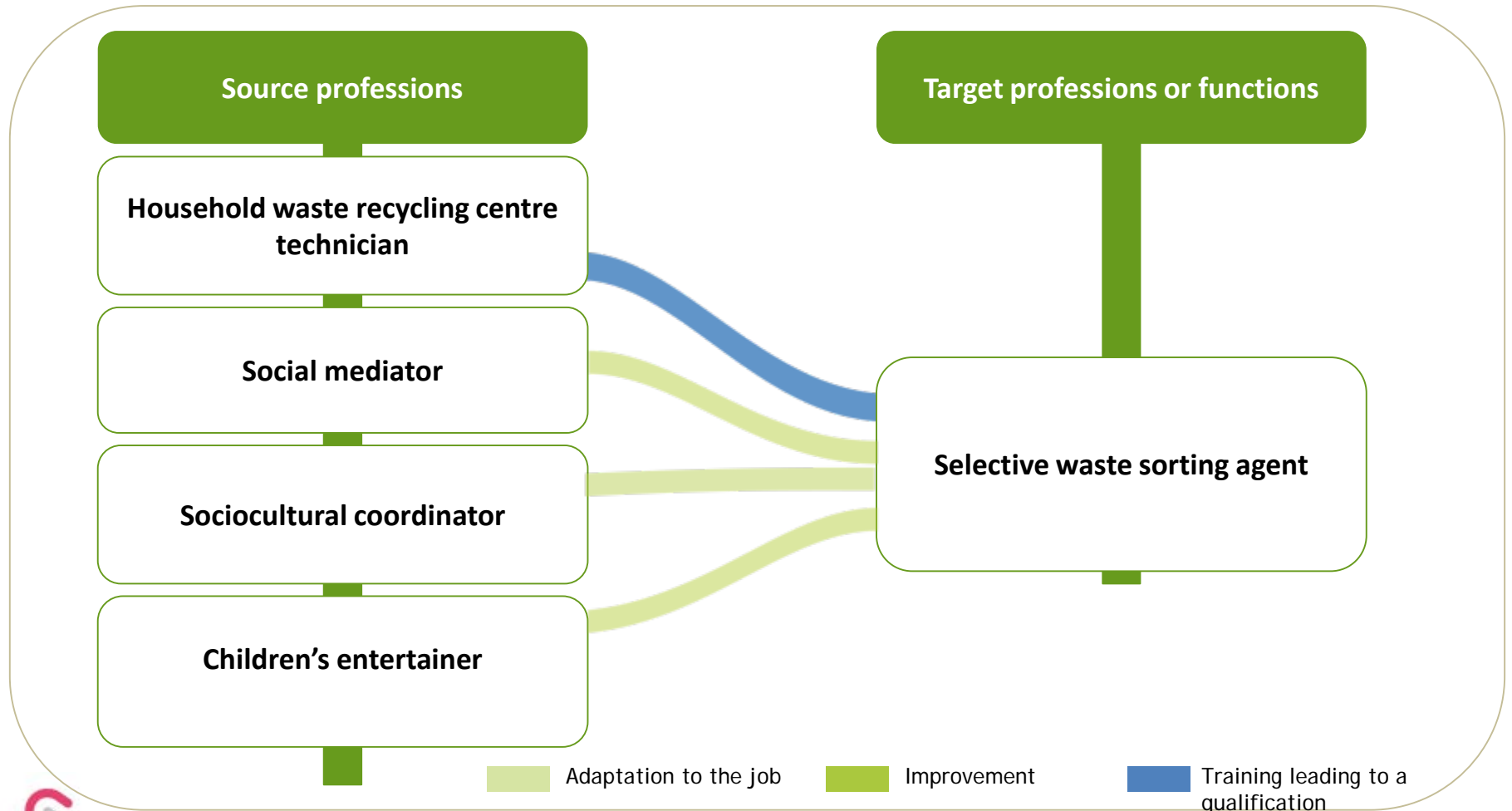
The advisory function (waste, water and energy), to save on materials, water and energy, includes the cross-cutting and cross-sectoral flow of jobs and skills. Focus on the advisory function of selective waste sorting

Developing functions and professions	Number of jobs counted to date	Low-end hypothesis 2019		High-end hypothesis 2019	
		Number of jobs	FTE needs (gap)	Number of jobs	FTE needs (gap)
Function: to limit the amount of waste in a defined territory	350	525	175	700	350
Selective waste sorting ambassador	350	525	175	700	350

## Evolving skills:

Optimisation with respect to the quantity and quality of selective waste sorting; information and public awareness; events in schools; controlling the quality of the collection; keeping inhabitants motivated through on-the-ground events and meetings

# The interconnecting gateway between source and target professions: *the example of the selective waste sorting mediator (waste theme)*





# Recommendations: Four projects with a cross-cutting focus on governance

## Surveillance and anticipation

- **Shared and collaborative surveillance**
  - ✓ Monitoring the change in the decisive factors
  - ✓ Sharing data on existing observatories

*Method: mobilising institutional partners (branches, OPCA and observatories) and using the work of experts in their sectors to generate reflection with respect to governance.*

## Cross-sectoral workshops

- **Putting in place forward-looking approaches on cross-cutting themes such as:**
  - Engineering in local ecology
  - Energy production, distribution and management
  - Energy, waste and landscaped areas combination
  - Urban planning, water and landscaped areas
  - Construction waste

*Method: cross-cutting working groups fuelled by surveillance*

## Development of the "Gateway" tool

- **Develop the first version of the "gateway professions" tool proposed by the CEP project team**
- **Ensure it is distributed**

*Method:*

- *Increase the number of target and source professions*
- *Work to create gateways*
- *Provide support in understanding the tool*
- *Develop a "general public" version*

## Improvement in the training offer

- **Develop training contents and certifications corresponding to the targeted professions**

*Method:*

- Support the re-engineering of training content by expected diploma level to adapt to key skills of the ECECLI matrix
- Promote to certifying bodies, the evolution in the professions and skills affected by energy and ecological transition as linked to the ECECLI matrix



**THANK YOU FOR YOUR  
ATTENTION**

19/07/2018

  
syndex  
L'EXPERTISE ENGAGÉE